# North Pacific Fishery Management Council

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#### **MINUTES**

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL SCIENTIFIC AND STATISTICAL COMMITTEE March 26-27, 1984 Anchorage, Alaska

The Scientific and Statistical Committee of the North Pacfic Fishery Management Council met in Anchorage on March 26-27, 1984. Members present were:

Donald H. Rosenberg, Chairman Richard Marasco, Vice Chairman William Aron Donald Bevan Bud Burgner Larry Hreha Jack Lechner Al Millikan John Clark Steve Langdon

#### C-1 April Council Meeting Agenda

The SSC discussed attendance at the April Council meeting. We request that the following be invited to represent the SSC.

Donald Rosenberg Donald Bevan William Aron

#### C-4 Other Business

The SSC recommends the Council respond to Congressman D'Amours' letter requesting exemption of FMPs from the Coastal Zone Management Act. In our view Coastal Zone Management objectives can come before the Council during its procedures for developing and amending a FMP. A requirement in another act requiring full consistency with other objectives may, in the extreme case, put the Council in the position of turning over the fishery management to the coastal zone management program.

### D-1 Herring FMP

#### Status of the FMP

The SSC reviewed the memo from the General Counsel which outlines concerns with the current Draft Bering/Chukchi Sea Herring Fishery Management Plan (FMP). These concerns relate primarily to the fact that the FMP will manage herring only in the Fisheries Conservation Zone (FCZ) and has no control of harvest throughout the range of the resource. The current FMP does not empower the Secretary to prevent overfishing if it occurs in state waters. In addition, the inshore (subsistence and commercial) fisheries, which the current FMP gives highest priority, have fully harvested the resource in recent years. Under these conditions the General Counsel questions the need for an FMP and implies that the current FMP would not be approved by the Secretary.

In consideration of these factors, the Council staff has a herring management option paper [Agenda item D-1(b)] which outlines alternatives which could be considered by the Council. These alternatives range from submission of the current FMP to that of a less active role in herring management by letting the state manage the resource.

The SSC provides the following comment with regard to these alternatives:

## (1) Change the FMP (alternative 2).

If the Council wishes to continue with plan development, the SSC recommends a workgroup be established to reconsider the plan objectives, harvest priorities, ABC formulation, management of herring throughout its range, and other issues. Subsequently, the plan should be redrafted to reflect Council intent on the above issues and current status of the resource.

# (2) <u>Include herring in the Bering Sea/Aleutian Islands Groundfish FMP</u> (alternative 3).

The SSC cannot support this alternative. Herring are not a groundfish, are not harvested by the same users, and data collection, analyses and stock assessment procedures are different.

In addition, the SSC would like to recommend an additional alternative for consideration by the Council. This alternative would be to develop a statement of management principles in concert with the Alaska Board of Fisheries, allow management to be carried out by the Board of Fisheries in accordance with those management principles, and for the Council to annually review the performance of management and the status of the resource through a Council committee.

The SSC would like to clarify for the Council the issue of overfishing, as determined by the current FMP ABC formula and the Alaska Department of Fish and Game management policy. This issue is raised in the options paper and in the March 11 memo from Pat Travers. Harvest of herring in state waters in three out of the past four years was substantially greater than what would be permitted if the FMP's ABC formula was followed. The Council should be aware

41A/I

that the current harvest levels do not constitute overfishing from the conservation standpoint. The state management policy is to carefully monitor spawning stocks to insure adequate spawning and to allow a harvest of 10 to 20 percent of the spawning stock. This is approximately an equilibrium level of harvest. Conversely, the FMP procedure has a rebuilding component in the formula. Thus, under the FMP, harvest levels would be held lower than under current state management at times of low stock abundance in an attempt to rebuild stocks to MSY levels.

#### Herring Research Request for Proposals

The SSC reviewed the report on Bering Sea Herring research and the Request for Proposals (RFP) as developed by the Council's workgroup. This workgroup was formed by the Council to undertake four tasks:

- (1) Identify knowledge gaps, particularly in offshore stocks.
- (2) Look at experimental designs to fill these gaps.
- (3) Consider the utility of the North Pacific Fishing Vessel Owner's Association proposal in light of the above, including costs of obtaining data.
- (4) Make recommendations concerning the proposal, or a modification thereof, considering phasing of research and the need for a multi-year project.

The workgroup's report was provided the Council at the December meeting. The workgroup in their report identify the primary objectives for offshore research and discuss means of collecting that information. They concluded that a combination of commercial and research vessels had the greatest potential for success, but that if funding and scheduling problems preclude the use of a research vessel, a project using only commercial fishing vessels is a viable option.

The workgroup recommended, therefore, that a RFP be developed for carrying out herring research using commercial vessels.

The SSC reviewed the workgroup's report and concur with the general direction of research being proposed. The SSC believes that the long range goals of offshore herring research in the Bering Sea should be directed at obtaining biomass estimates and information on stock composition and distribution. We believe that the research objectives outlined in the workgroup report and RFP are directed at these goals.

With regard to the RFP, the SSC recommends modifications as follows:

- (1) Page 1, fourth line from the bottom, strike "to obtain a reliable research vessel time may be needed."
- (2) Page 2, strike last sentence in first full paragraph.
- (3) Appendix A, Page 1, add to the <u>Payment</u> paragraph after "(approximately January 28, 1985);" "The allocation will be limited in that no more than 1,000 mt may be taken from any one degree latitude by two degrees

41A/I -3-

longitude area." The SSC recommends that a figure be included in the RFP indicating these 1° by 2° areas. The SSC believes that this limitation should be included to provide additional protection in the event discrete stocks are encountered.

The SSC in its review of the RFP did discuss the costs associated with the providing of this vessel time. Our best estimate is that the cost of the charter for these four vessels for the period would be around \$400,000. Information provided the SSC indicates that the Council would receive bids in the range of 6,000 to 7,000 mt of herring in response to the RFP.

The SSC discussed the biological risk associated with a harvest of herring of this magnitude from the offshore fisheries. A majority of the SSC felt that there was little biological risk associated with a one time harvest of up to 5% (8,400 mt) of the current spawning biomass estimate.

The SSC reviewed the scientific support budget for this research. Indications were that a majority of the scientific personnel could be provided by federal and state agencies, but that approximately \$50,000 would be required for temporary personnel, supplies and travel.

In addition, the second year of the herring scale pattern analysis research will need to be funded and may require some additional funds to handle the increasing number of samples. The contractor has been asked to review their budget and make recommendations, if necessary, to the Council.

#### D-2 King and Tanner Crab FMPs

The SSC received a presentation by the Council staff on the status of the FMP and a review of the proposals that are of mutual concern to the Council and Board. The SSC did not address these proposals in detail but instead in three general areas: changes in management strategies, exclusive registration area/pot limits and trawl restrictions.

#### Management Strategies

The SSC did not receive any analysis of the implication of the adoption of 3-S management strategy. Therefore, the SSC examined this in concept only.

The SSC finds acceptable the concept of a 3-S management strategy for all species of crab when stocks are not at low levels of abundance and when recruitment is stable or increasing. 3-S management has increased risks of handling mortalities and should not be applied at present in the areas that were closed last year due to extremely low population levels.

#### Exclusive Registration/Pot Limits

The SSC received and reviewed a report entitled "An Analysis of Proposed Exclusive Registration Areas and Pot Limits in the Alaska Tanner Crab Fishery," by Gunnar Knapp and Al Didier. The SSC was provided an oral summary of the report by the authors.

41A/I -4-

The SSC is in agreement with the major conclusion reached in the study, "...while we cannot demonstrate that they would have significant effects, we also cannot demonstrate that they would not."

It is noted however, that statements are made throughout the text with respect to the impact of the subject measures without adequate qualifications. It was suggested that the authors make the appropriate modifications.

During the discussion the SSC was informed that the major goal of these management measures was the protection of small local fleets. The SSC feels that this goal needs to be included in the plan if that is the Council's desire.

The SSC discussed if exclusive areas and/or pot limits would provide the desired protection for small local fleets.

What the answer to this question is, we can't say. The impact of these measures is dependent upon biological and economic conditions at any one particular time. In some cases, they would achieve the objective, while in others they will not. It must be recognized that any benefits that would be realized are short-term in nature. In the long run, benefits would disappear because of open access to the fishery.

The SSC would note that at present the Council is in the position of accepting and implementing exclusive registration in certain areas (Cook Inlet and Prince William Sound) and rejecting them in others (South Peninsula and Southeastern).

#### Trawl Restrictions

The SSC received a presentation by ADF&G staff on the proposed closures. During this presentaion it was indicated that the proposed closures covered 80% of what is considered to be the critical habitat for king crab while in soft shell condition.

The SSC notes that:

- (1) stock abundance of red king crab, both females and males, is at an all-time low;
- (2) the data indicate that reproductive success is at the lowest level observed in recent years; and
- (3) recruitment to the exploitable stock for the last two years has been at an all-time low.

The SSC therefore concluded that a conservation problem exists.

Data are not available which would allow quantification of the benefits and costs of the proposed measures. Implementation of these closures will affect the developing domestic groundfish fishery. Quantification of this impact is made difficult by the lack of information on how harvesting costs would be affected by changes in operational procedures. It is also difficult to assess the impact of this fishery on crab stocks because of the lack of information on either crab mortality in the trawl fishery or the ecosystem impact of harvesting predators.

41A/I -5-

The SSC could not assess the merits of this proposal.

Regardless of the actions taken, the SSC recommends that:

- (1) a mandatory domestic observer program be instituted;
- (2) that State and Federal agencies develop common systems for ground-fish data reporting;
- (3) that alternative time/area closures and gear modifications be examined with crab and trawl fishery participants;
- (4) that a study be undertaken on the direct impacts of a trawl fishery on king crab stocks versus the possible benefits of crab predator removal by the trawl fishery; and
- (5) that the cataloging of habitat-species associations be undertaken in these proposed closure areas.

The SSC wish to note that if these closures are adopted both the Gulf of Alaska and Bering Sea/Aleutian Islands Groundfish FMPs will have to be amended.

#### E. CONTRACTS AND PROPOSALS

#### Contracts

The SSC reviewed the final report to NMFS Contract 83-ABC-00165. Members of the SSC have provided the contractor with comments. The SSC recommends the Council accept this report and notify the NMFS of this approval.

The SSC reviewed the report entitled "Projections of Domestic Fleet and Effort Required to Harvest the Alaska Groundfish Optimum Yield" by Natural Resources Consultants. The SSC recommend acceptance of this report.

#### FY84 Programmatic Funds

The SSC was informed by Council staff that the Domestic Groundfish Monitoring project and the Chinook Salmon Incidental Catch - Part II projects funding has been approved. The SSC received the status of these proposals and recommends the following:

## (1) Domestic Groundfish Monitoring

That the contract not be issued at this time. The SSC was informed that a workgroup has been formed to assess data needs for management of the groundfish fisheries. The SSC requests that this workgroup complete their evaluation by the May meeting. The SSC recommends that the Council not take action on this contract until that evaluation is complete.

The SSC requested that the Council staff examine the possibility of using \$10,000 of this fund allotted from this project to support the Fisheries Management Conference.

## (2) Chinook Salmon Incidental Catch - Part II

That the contract be issued. Since this is a continuation of an already funded effort, the SSC recommends that it be sole sourced to the University of Washington.

41A/I -6-

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# (2) Chinade Salmen locaderest Cateb - Part FI

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## (3) Bering Sea Herring Scale Analysis - Part II

That the contract be issued as soon as approval is received. This is important in that the sampling must start in early May. This project may be subject to modification in light of the proposed offshore sampling program.

#### FY85 Programmatic Funds

The SSC reviewed the proposals which were received by the Council. The two proposals received were:

"The Reproductive Biology of Brown King Crab" by A.J. Paul of the University of Alaska

"Evaluation of Gear-Caused Scars on Salmon" by Alan Davis of the Alaska Department of Fish and Game

In reviewing these proposals the SSC discussed the priorities for data gathering and analysis needed for the Council in all areas. Although we find both of the proposals to be sound and would lead to new scientific information, the SSC did not feel that new scientific information was of high enough priority for the Council to start agency review of the proposals.

The SSC does have one project to be considered for agency review at this time:

## Offshore Research on Bering Sea Herring - \$450,000 to \$500,000

## (1) Scientific Program - \$50,000 to \$100,000

To support the scientific program as described in the Council document as described in the December 5, 1983 report entitled "Report to the North Pacific Fishery Management Council on Bering Sea Herring Research" and in the Draft "Request for Proposals Research Vessels - Herring Survey."

#### (2) Research Vessel Support - \$400,000

The charter commercial fishing vessels to support herring research as described in (1) above.

The SSC has identified additional areas of study with regard to the proposed closures for on-bottom trawling. The details of these studies are not available at this time and therefore we cannot recommend agency review at this time.

In addition, the SSC does have concern over the limitation being placed on the programmatic funding with regard to development and continuation of data collection programs.

Over the past several years there has been a rapid expansion of domestic groundfish fishing activities in the Gulf of Alaska and eastern Bering Sea. Our ability to collect data from certain segments of this fishery are quite limited. Management of these fisheries in the future will be hindered by the lack of information. Given the urgency of this issue, the SSC feels that a need exists to define the nature of a monitoring program and determine how the program will be funded.

41A/I -7-

## (b) Region for Corring Scale Analysis - Part II

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## 11) Research Vessel Support + \$460.000

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